

Table S1. The average daily intake of each food group taking into account in the principal components analysis (PCA) performed for the identification of dietary patterns

Food group	Intake [g/day]
Milk low fat	223.6 ± 220.1
High fat cheese, cream	28.8 ± 23.0
Margarines and mayonnaise	6.7 ± 6.6
Animal fats	13.9 ± 15.8
Eggs	15.6 ± 15.1
Fish	13.9 ± 11.1
Unrefined grains	87.8 ± 85.8
Refined grains	77.8 ± 65.0
Mixed dishes	33.4 ± 22.4
Soups	249.8 ± 144.8
Alcohol	56.9 ± 127.5
Sweets	48.5 ± 38.2
Beverages	199.6 ± 342.2
Sugar and honey	17.0 ± 16.1
Nuts, seeds, raisins	14.3 ± 22.3
Fruits	296.7 ± 212.1
Juices	133.8 ± 141.7
Vegetables	312.8 ± 195.2
Tea, coffee	943.5 ± 467.9
Red and processed meat	75.5 ± 47.0
Poultry	52.9 ± 37.4
Potatoes and chips	90.4 ± 59.2

Table S2. The best models built using best predictor subset selection mode (according AIC) for CVD total prevalence and different dietary patterns

(Intercept)	Age	BMI	Healthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-6.97	0.099		+					+	-0.03	+	0.096	0.17	9	1490.06	0.19
-7.32	0.098		+					+		+	0.095	0.17	8	1490.14	0.18
-7.24	0.098		+	-0.0003	0.016			+		+	0.097	0.17	10	1490.26	0.17
-7.48	0.098		+		0.004			+		+	0.096	0.17	9	1491.60	0.09
-7.15	0.098		+	-7.51194E-05				+		+	0.096	0.17	9	1491.62	0.09
-6.87	0.099		+	-5.25222E-05				+	-0.03	+	0.097	0.17	10	1491.81	0.08
-7.09	0.099		+		0.003			+	-0.03	+	0.096	0.17	10	1491.89	0.07
-7.12	0.099		+	-0.0002	0.014			+	-0.01	+	0.097	0.17	11	1492.04	0.07
-6.97	0.099		+			+		+	-0.03	+	0.096	0.17	10	1492.06	0.07
(Intercept)	Age	BMI	Unhealthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-7.62	0.098		+		0.011			+		+	0.097	0.17	9	1489.00	0.39
-7.53	0.098		+	-0.0001	0.015			+		+	0.097	0.17	10	1490.70	0.16
-7.49	0.098		+		0.010			+	-0.01	+	0.097	0.17	10	1490.78	0.16
-7.62	0.098		+		0.011	+		+		+	0.097	0.17	10	1490.91	0.15
-7.25	0.097		+					+		+	0.095	0.17	8	1490.99	0.14
(Intercept)	Age	BMI	Traditional DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-7.32	0.098		+	-0.0003	0.019			+		+	0.097	0.17	10	1490.94	0.30
-7.34	0.097		+					+		+	0.095	0.17	8	1492.06	0.17
-7.00	0.098		+					+	-0.03	+	0.096	0.17	9	1492.07	0.17
-7.59	0.097		+		0.008			+		+	0.095	0.17	9	1492.49	0.14
-7.24	0.098		+	-0.0003	0.018			+	-0.01	+	0.097	0.17	11	1492.84	0.12
-7.31	0.098		+	-0.0003	0.019	+		+		+	0.097	0.17	11	1492.89	0.11

CVD – cardiovascular disease; BMI – body mass index; DP – dietary pattern; SFA – saturated fatty acids; AIC - Akaike information criterion

Table S3. The best models built using best predictor subset selection mode (according AIC) for diabetes prevalence and different dietary patterns

(Intercept)	Age	Healthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-4.39	0.056	+	-0.0007	0.04	+		+		+	0.097	0.17	11	1029.32	0.24
-4.40	0.056	+	-0.0006	0.04			+		+	0.095	0.17	10	1029.45	0.23
-4.78	0.055	+	-0.0008	0.05	+		+	0.03	+	0.098	0.18	12	1029.89	0.18
-4.74	0.056	+	-0.0007	0.05			+	0.03	+	0.096	0.17	11	1030.36	0.14
-4.21	0.055	+	-0.0007	0.04	+		+			0.093	0.17	9	1030.70	0.12
-4.59	0.054	+	-0.0008	0.05	+		+	0.03		0.094	0.17	10	1031.32	0.09
(Intercept)	Age	Unhealthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-4.83	0.056	+		0.015	+		+		+	0.103	0.18	10	1017.89	0.28
-4.76	0.056	+		0.014			+		+	0.101	0.18	9	1018.20	0.24
-4.63	0.056	+	-0.0002	0.024	+		+		+	0.103	0.19	11	1019.10	0.15
-4.61	0.055	+		0.015	+		+			0.099	0.18	8	1019.75	0.11
-4.96	0.056	+		0.016	+		+	0.01	+	0.103	0.19	11	1019.76	0.11
-4.61	0.056	+	-0.0002	0.021			+		+	0.101	0.18	10	1019.80	0.11
(Intercept)	Age	Traditional DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-3.75	0.055	+	-0.0009	0.035	+		+		+	0.101	0.18	11	1021.67	0.35
-3.68	0.056	+	-0.0008	0.032			+		+	0.100	0.18	10	1022.07	0.29
-3.99	0.055	+	-0.0009	0.040	+		+	0.02	+	0.102	0.18	12	1023.04	0.18
-3.54	0.055	+	-0.0009	0.034	+		+			0.098	0.18	9	1023.05	0.18

CVD – cardiovascular disease; BMI – body mass index; DP – dietary pattern; SFA – saturated fatty acids; AIC - Akaike information criterion

Table S4. The best models built using best predictor subset selection mode (according AIC) for IFG prevalence and different dietary patterns

(Intercept)	Age	Healthy DP	Energy intake_kod	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-1.68	0.021	+					+		+	0.061	0.09	8	1897.77	0.34
-1.77	0.021	+	+				+		+	0.062	0.09	9	1898.58	0.23
-1.79	0.021	+		0.003			+		+	0.061	0.09	9	1899.36	0.15
-1.54	0.021	+					+	-0.010	+	0.061	0.09	9	1899.39	0.15
-1.68	0.021	+			+		+		+	0.061	0.09	9	1899.77	0.13
(Intercept)	Age	Unhealthy DP	Energy intake_kod	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-1.67	0.021	+					+		+	0.063	0.09	8	1894.32	0.35
-1.74	0.021	+	+				+		+	0.064	0.09	9	1895.18	0.23
-1.53	0.021	+					+	-0.011	+	0.063	0.09	9	1895.88	0.16
-1.73	0.021	+		0.002			+		+	0.063	0.09	9	1896.13	0.14
-1.67	0.021	+			+		+		+	0.063	0.09	9	1896.32	0.13
(Intercept)	Age	Traditional DP	Energy intake_kod	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-1.69	0.022	+					+		+	0.064	0.09	8	1892.92	0.38
-1.56	0.022	+					+	-0.010	+	0.064	0.09	9	1894.55	0.17
-1.73	0.022	+	+				+		+	0.064	0.09	9	1894.67	0.16
-1.64	0.022	+		-0.002			+		+	0.064	0.09	9	1894.81	0.15
-1.69	0.022	+			+		+		+	0.064	0.09	9	1894.92	0.14

CVD – cardiovascular disease; BMI – body mass index; DP – dietary pattern; SFA – saturated fatty acids; AIC - Akaike information criterion; Energy intake_kod – categorical variable by median value

Table S5. The best models built using best predictor subset selection mode (according AIC) for hypertension prevalence and different dietary patterns

(Intercept)	Age	BMI_4	Healthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-3.99	0.057	+	+		0.007	+		+			0.164	0.22	11	2358.91	0.12
-3.83	0.057	+	+	-0.0002	0.014	+		+			0.165	0.22	12	2359.03	0.11
-3.75	0.057	+	+			+		+			0.164	0.22	10	2359.18	0.11
-3.87	0.056	+	+		0.007	+		+		+	0.166	0.22	13	2359.19	0.10
-3.64	0.056	+	+			+		+		+	0.165	0.22	12	2359.43	0.09
-3.73	0.056	+	+	-0.0002	0.014	+		+		+	0.167	0.23	14	2359.56	0.09
-3.54	0.056	+	+	-0.0002	0.016	+				+	0.166	0.22	13	2359.95	0.07
-3.62	0.057	+	+	-0.0002	0.017	+					0.164	0.22	11	2360.01	0.07
-3.54	0.057	+	+			+		+	-0.016		0.164	0.22	11	2360.07	0.07
-3.81	0.057	+	+		0.006	+		+	-0.011		0.165	0.22	12	2360.36	0.06
-3.43	0.056	+	+			+		+	-0.015	+	0.166	0.22	13	2360.39	0.06
-3.70	0.056	+	+		0.006	+		+	-0.011	+	0.166	0.22	14	2360.69	0.05
(Intercept)	Age	BMI_4	Unhealthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-3.53	0.056	+	+			+					0.163	0.22	9	2357.76	0.22
-3.44	0.055	+	+			+				+	0.165	0.22	11	2358.47	0.15
-3.61	0.056	+	+			+		+			0.164	0.22	10	2358.64	0.14
-3.65	0.056	+	+		0.004	+					0.164	0.22	10	2358.82	0.13
-3.39	0.056	+	+			+			-0.011		0.164	0.22	10	2359.18	0.11
-3.64	0.056	+	+	5.39E-05		+					0.163	0.22	10	2359.35	0.10
-3.50	0.055	+	+			+		+		+	0.165	0.22	12	2359.71	0.08
-3.55	0.055	+	+		0.003	+				+	0.165	0.22	12	2359.74	0.08
(Intercept)	Age	BMI_4	Traditional DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-3.69	0.056	+	+			+		+			0.161	0.22	10	2364.43	0.12
-3.51	0.056	+	+	-0.0002	0.012	+					0.162	0.22	11	2364.88	0.10
-3.45	0.056	+	+			+		+	-0.018		0.162	0.22	11	2364.99	0.09
-3.32	0.057	+	+			+			-0.021		0.161	0.22	10	2365.14	0.09
-3.58	0.056	+	+			+		+		+	0.163	0.22	12	2365.27	0.08
-3.59	0.057	+	+			+					0.160	0.22	9	2365.31	0.08
-3.49	0.056	+	+			+				+	0.162	0.22	11	2365.31	0.08
-3.23	0.056	+	+			+			-0.020	+	0.163	0.22	12	2365.35	0.08
-3.41	0.055	+	+	-0.0002	0.011	+				+	0.163	0.22	13	2365.64	0.07
-3.59	0.056	+	+	-0.0002	0.010	+		+			0.162	0.22	12	2365.83	0.06
-3.35	0.055	+	+			+		+	-0.017	+	0.163	0.22	13	2365.88	0.06
-3.58	0.056	+	+	-4.8E-05		+		+			0.161	0.22	11	2366.08	0.05
-3.77	0.056	+	+		0.003	+		+			0.161	0.22	11	2366.10	0.05

CVD – cardiovascular disease; BMI – body mass index; DP – dietary pattern; SFA – saturated fatty acids; AIC - Akaike information criterion; BMI_4 – categorical variable: underweight <18,5 kg/m², normal body weight 18,5-24,9 kg/m²; overweight 25-29,9 kg/m²; obesity ≥30 kg/m²

Table S6. The best models built using best predictor subset selection mode (according AIC) for overweight and obesity prevalence and different dietary patterns

(Intercept)	Age_kod	Healthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
0.45	+	+	-0.0002	0.016	+		+		+	0.068	0.10	11	2311.54	0.40
0.47	+	+			+		+		+	0.066	0.09	9	2312.57	0.24
0.27	+	+		0.006	+		+		+	0.067	0.10	10	2312.94	0.20
0.37	+	+	-0.0002	0.017	+		+	0.006	+	0.068	0.10	12	2313.41	0.16
(Intercept)	Age_kod	Unhealthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
0.29	+	+		0.008	+		+		+	0.074	0.11	10	2296.35	0.37
0.27	+	+	0.0001		+		+		+	0.074	0.11	10	2297.83	0.18
0.53	+	+			+		+		+	0.073	0.10	9	2297.92	0.17
0.18	+	+		0.008	+		+	0.007	+	0.074	0.11	11	2298.14	0.15
0.32	+	+	-4.5E-05	0.010	+		+		+	0.074	0.11	11	2298.27	0.14
(Intercept)	Age_kod	Traditional DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
0.74	+	+	-0.0003	0.012	+		+		+	0.075	0.11	11	2297.26	0.49
0.77	+	+	-0.0002		+		+		+	0.074	0.11	10	2298.14	0.32
0.65	+	+	-0.0003	0.013	+		+	0.007	+	0.075	0.11	12	2299.10	0.20

CVD – cardiovascular disease; BMI – body mass index; DP – dietary pattern; SFA – saturated fatty acids; AIC - Akaike information criterion; Age_kod – categorical variable by median value

Table S7. The best models built using best predictor subset selection mode (according AIC) for visceral obesity prevalence and different dietary patterns

(Intercept)	Age	BMI	Healthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-19.09	0.030	0.75	+			+		+			0.480	0.68	8	1200.69	0.29
-19.36	0.031	0.75	+			+		+		+	0.481	0.68	10	1201.29	0.22
-19.33	0.031	0.75	+	8.8E-05		+		+			0.480	0.68	9	1202.07	0.15
-19.23	0.030	0.75	+		0.004	+		+			0.480	0.68	9	1202.30	0.13
-19.17	0.030	0.75	+			+		+	0.006		0.480	0.68	9	1202.63	0.11
-19.61	0.032	0.75	+	8.89E-05		+		+		+	0.481	0.68	11	1202.65	0.11
(Intercept)	Age	BMI	Unhealthy DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-18.78	0.031	0.75	+	-0.0002		+		+			0.479	0.67	9	1204.91	0.20
-19.08	0.032	0.75	+	-0.0002		+		+		+	0.480	0.68	11	1205.40	0.16
-19.10	0.031	0.75	+			+		+			0.478	0.67	8	1205.45	0.15
-19.41	0.032	0.75	+			+		+		+	0.479	0.67	10	1205.56	0.14
-18.96	0.031	0.75	+		-0.007	+		+			0.479	0.67	9	1206.07	0.11
-19.26	0.032	0.75	+		-0.006	+		+		+	0.480	0.68	11	1206.49	0.09
-18.74	0.031	0.75	+	-0.0003	0.004	+		+			0.479	0.67	10	1206.77	0.08
-18.77	0.031	0.75	+	-0.0002		+		+	-0.0004		0.479	0.67	10	1206.91	0.07
(Intercept)	Age	BMI	Traditional DP	Energy intake	Fiber	Gender	Physical activity	Place of residence	SFA	Smoking	R^2	adjR^2	df	AIC	Weight
-18.91	0.029	0.74	+			+		+			0.478	0.67	8	1207.62	0.26
-19.21	0.031	0.75	+			+		+		+	0.479	0.67	10	1207.74	0.24
-18.79	0.029	0.74	+		-0.004	+		+			0.478	0.67	9	1209.27	0.11
-19.04	0.030	0.74	+			+		+	0.009		0.478	0.67	9	1209.42	0.10
-19.11	0.031	0.75	+		-0.003	+		+		+	0.479	0.67	11	1209.53	0.10
-19.32	0.031	0.75	+			+		+	0.008	+	0.479	0.67	11	1209.60	0.09
-18.89	0.029	0.74	+	-4.9E-06		+		+			0.478	0.67	9	1209.62	0.09

CVD – cardiovascular disease; BMI – body mass index; DP – dietary pattern; SFA – saturated fatty acids; AIC - Akaike information criterion

Table S8. OR calculated using averaged models for CVD prevalence in relation to dietary patterns adjusted for other predictors

Model	Variables in model	OR (95% CI)	p
CVD total prevalence vs Healthy Dietary Pattern	(Intercept)		0.0000
	Age	1.10 (1.09-1.12)	0.0000
	Healthy DP (L)	1.33 (0.98-1.79)	0.0654
	Healthy DP (C)	0.93 (0.71-1.22)	0.6009
	Healthy DP (Q)	1.06 (0.81-1.38)	0.6916
	Energy intake	1.00 (1.00-1.00)	0.2859
	Fiber	1.01 (0.99-1.03)	0.2886
	Gender (Male)	1.00 (0.75-1.34)	0.9959
	Place of residence (urban)	0.56 (0.41-0.75)	0.0001
	Saturated fatty acids	0.97 (0.93-1.02)	0.2359
	Smoking (past)	1.59 (1.18-2.14)	0.0024
	Smoking (current)	1.30 (0.89-1.89)	0.1800
CVD total prevalence vs Unhealthy Dietary Pattern	(Intercept)		0.0000
	Age	1.10 (1.08-1.12)	0.0000
	Unhealthy DP (L)	0.75 (0.55-1.03)	0.0747
	Unhealthy DP (C)	1.11 (0.85-1.46)	0.4273
	Unhealthy DP (Q)	1.06 (0.81-1.38)	0.6720
	Energy intake	1.00 (1.00-1.00)	0.5911
	Fiber	1.01 (1.00-1.02)	0.0856
	Gender (Male)	0.96 (0.72-1.27)	0.7781
	Place of residence (urban)	0.56 (0.41-0.75)	0.0001
	Saturated fatty acids	0.99 (0.95-1.03)	0.6512
	Smoking (past)	1.55 (1.15-2.09)	0.0040
	Smoking (current)	1.29 (0.88-1.88)	0.1905
CVD total prevalence vs Traditional Dietary Pattern	(Intercept)		0.00000
	Age	1.10 (1.08-1.12)	0.00000
	Traditional DP (L)	1.17 (0.86-1.61)	0.32040
	Traditional DP (C)	1.11 (0.86-1.44)	0.41531
	Traditional DP (Q)	0.88 (0.67-1.16)	0.36456
	Energy intake	1.00 (1.00-1.00)	0.07741
	Fiber	1.02 (1.00-1.04)	0.08419
	Gender (Male)	0.97 (0.73-1.29)	0.82571
	Place of residence (urban)	0.62 (0.46-0.84)	0.00208
	Saturated fatty acids	0.98 (0.94-1.03)	0.40671
	Smoking (past)	1.55 (1.15-2.09)	0.00422
	Smoking (current)	1.27 (0.87-1.86)	0.21531

CVD –cardiovascular disease; DP – dietary pattern; OR (95% CI) – odds ratio (95% confidence interval); L, Q, C - the coefficients of linear, quadratic and cubic relationships, respectively

Table S9. OR calculated using averaged models for hypertension prevalence in relation to dietary patterns adjusted for other predictors

Model	Variables in model	OR (95% CI)	p
Hypertension prevalence vs Healthy Dietary Pattern	(Intercept)		0.0000
	Age	1.06 (1.05-1.07)	0.0000
	BMI <18,5 kg/m ²	1.14 (0.37-3.54)	0.8244
	BMI 25-29,9 kg/m ²	1.77 (1.40-2.24)	0.0000
	BMI ≥30 kg/m ²	3.38 (2.59-4.41)	0.0000
	Healthy DP (L)	0.79 (0.62-1.01)	0.0611
	Healthy DP (C)	0.84 (0.69-1.02)	0.0864
	Healthy DP (Q)	1.03 (0.84-1.26)	0.7852
	Energy intake	1.00 (1.00-1.00)	0.1209
	Fiber	1.01 (1.00-1.03)	0.1366
	Gender (Male)	2.68 (2.13-3.37)	0.0000
	Place of residence (urban)	1.25 (1.00-1.56)	0.0483
	Saturated fatty acids	0.99 (0.96-1.02)	0.3764
	Smoking (past)	1.03 (0.82-1.30)	0.7878
	Smoking (current)	0.80 (0.62-1.03)	0.0895
Hypertension prevalence vs Unhealthy Dietary Pattern	(Intercept)		0.00000
	Age	1.06 (1.05-1.07)	0.00000
	BMI <18,5 kg/m ²	1.10 (0.36-3.36)	0.86467
	BMI 25-29,9 kg/m ²	1.74 (1.37-2.20)	0.00000
	BMI ≥30 kg/m ²	3.27 (2.51-4.25)	0.00000
	Unhealthy DP (L)	0.77 (0.62-0.95)	0.01550
	Unhealthy DP (C)	0.96 (0.79-1.17)	0.70046
	Unhealthy DP (Q)	1.11 (0.91-1.36)	0.29305
	Energy intake	1.00 (1.00-1.00)	0.52201
	Fiber	1.00 (1.00-1.01)	0.35735
	Gender (Male)	2.87 (2.31-3.57)	0.00000
	Place of residence (urban)	1.12 (0.90-1.39)	0.32531
	Saturated fatty acids	0.99 (0.96-1.02)	0.44780
	Smoking (past)	1.03 (0.81-1.30)	0.82203
	Smoking (current)	0.81 (0.63-1.05)	0.11627
Hypertension prevalence vs Traditional Dietary Pattern	(Intercept)		0.00000
	Age	1.06 (1.05-1.07)	0.00000
	BMI <18,5 kg/m ²	1.07 (0.35-3.28)	0.90916
	BMI 25-29,9 kg/m ²	1.76 (1.39-2.23)	0.00000
	BMI ≥30 kg/m ²	3.37 (2.58-4.39)	0.00000
	Traditional DP (L)	0.96 (0.77-1.19)	0.71454
	Traditional DP (C)	1.00 (0.82-1.22)	0.99471
	Traditional DP (Q)	1.06 (0.87-1.30)	0.54251
	Energy intake	1.00 (1.00-1.00)	0.16760
	Fiber	1.01 (1.00-1.02)	0.17104
	Gender (Male)	2.85 (2.29-3.56)	0.00000
	Place of residence (urban)	1.17 (0.94-1.45)	0.15252
	Saturated fatty acids	0.98 (0.95-1.01)	0.19032
	Smoking (past)	1.03 (0.82-1.31)	0.77616
	Smoking (current)	0.81 (0.63-1.05)	0.10516

CVD –cardiovascular disease; DP – dietary pattern; OR (95% CI) – odds ratio (95% confidence interval); BMI – body mass index; L, Q, C - the coefficients of linear, quadratic and cubic relationships, respectively

Table S10. OR calculated using averaged models for diabetes prevalence in relation to dietary patterns adjusted for other predictors

Model	Variables in model	OR (95% CI)	p
Diabetes prevalence vs Healthy Dietary Pattern	(Intercept)		0.00000
	Age	1.06 (1.04-1.08)	0.00000
	Healthy DP (L)	0.72 (0.48-1.07)	0.10792
	Healthy DP (C)	1.00 (0.72-1.39)	0.98100
	Healthy DP (Q)	1.19 (0.86-1.66)	0.29413
	Energy intake	1.00 (1.00-1.00)	0.00121
	Fiber	1.05 (1.02-1.07)	0.00015
	Gender (Male)	1.35 (0.94-1.92)	0.10317
	Place of residence (urban)	0.21 (0.14-0.30)	0.00000
	Saturated fatty acids	1.03 (0.98-1.09)	0.25210
	Smoking (past)	1.59 (1.10-2.30)	0.01469
	Smoking (current)	1.17 (0.74-1.83)	0.50527
Diabetes prevalence vs Unhealthy Dietary Pattern	(Intercept)		0.00000
	Age	1.06 (1.04-1.08)	0.00000
	Unhealthy DP (L)	0.47 (0.31-0.70)	0.00026
	Unhealthy DP (C)	0.80 (0.57-1.11)	0.17884
	Unhealthy DP (Q)	1.34 (0.96-1.85)	0.08238
	Energy intake	1.00 (1.00-1.00)	0.43835
	Fiber	1.02 (1.00-1.04)	0.06088
	Gender (Male)	1.33 (0.94-1.87)	0.10470
	Place of residence (urban)	0.17 (0.12-0.25)	0.00000
	Saturated fatty acids	1.01 (0.96-1.06)	0.71542
	Smoking (past)	1.63 (1.12-2.37)	0.01113
	Smoking (current)	1.21 (0.77-1.91)	0.40443
Diabetes prevalence vs Traditional Dietary Pattern	(Intercept)		0.00000
	Age	1.06 (1.04-1.08)	0.00000
	Traditional DP (L)	2.00 (1.33-3.02)	0.00093
	Traditional DP (C)	1.05 (0.77-1.44)	0.74857
	Traditional DP (Q)	1.00 (0.71-1.41)	0.99898
	Energy intake	1.00 (1.00-1.00)	0.00006
	Fiber	1.04 (1.01-1.06)	0.00238
	Gender (Male)	1.34 (0.95-1.90)	0.09423
	Place of residence (urban)	0.21 (0.15-0.30)	0.00000
	Saturated fatty acids	1.02 (0.97-1.08)	0.42720
	Smoking (past)	1.59 (1.09-2.31)	0.01576
	Smoking (current)	1.18 (0.75-1.86)	0.48068

CVD –cardiovascular disease; DP – dietary pattern; OR (95% CI) – odds ratio (95% confidence interval); L, Q, C - the coefficients of linear, quadratic and cubic relationships, respectively

Table S11. OR calculated using averaged models for impaired fasting glucose prevalence in relation to dietary patterns adjusted for other predictors

Model	Variables in model	OR (95% CI)	p
IFG prevalence vs Healthy Dietary Pattern	(Intercept)		0.00000
	Age	1.02 (1.01-1.03)	0.00025
	Healthy DP (L)	0.96 (0.76-1.22)	0.74915
	Healthy DP (C)	1.01 (0.81-1.26)	0.94157
	Healthy DP (Q)	1.09 (0.87-1.36)	0.46593
	Energy intake_kod	1.14 (0.90-1.45)	0.27547
	Fiber	1.00 (0.99-1.01)	0.52317
	Gender (Male)	1.00 (0.78-1.28)	0.99111
	Place of residence (urban)	0.35 (0.28-0.44)	0.00000
	Saturated fatty acids	0.99 (0.96-1.02)	0.53786
	Smoking (past)	1.32 (1.02-1.70)	0.03695
	Smoking (current)	1.39 (1.04-1.85)	0.02733
IFG prevalence vs Unhealthy Dietary Pattern	(Intercept)		0.00000
	Age	1.02 (1.01-1.03)	0.00030
	Unhealthy DP (L)	0.97 (0.75-1.26)	0.82719
	Unhealthy DP (C)	0.86 (0.69-1.08)	0.18673
	Unhealthy DP (Q)	1.19 (0.95-1.49)	0.12158
	Energy intake_kod	1.16 (0.89-1.51)	0.28539
	Fiber	1.00 (0.99-1.01)	0.65907
	Gender (Male)	1.00 (0.79-1.27)	0.98160
	Place of residence (urban)	0.35 (0.27-0.44)	0.00000
	Saturated fatty acids	0.99 (0.96-1.02)	0.50848
	Smoking (past)	1.32 (1.02-1.71)	0.03407
	Smoking (current)	1.39 (1.04-1.85)	0.02549
IFG prevalence vs Traditional Dietary Pattern	(Intercept)		0.00000
	Age	1.02 (1.01-1.03)	0.00020
	Traditional DP (L)	1.14 (0.90-1.44)	0.28332
	Traditional DP (C)	0.99 (0.79-1.24)	0.91353
	Traditional DP (Q)	1.26 (1.00-1.58)	0.04730
	Energy intake_kod	1.07 (0.83-1.37)	0.61988
	Fiber	1.00 (0.99-1.01)	0.74315
	Gender (Male)	1.00 (0.79-1.27)	0.99220
	Place of residence (urban)	0.34 (0.27-0.44)	0.00000
	Saturated fatty acids	0.99 (0.96-1.02)	0.54453
	Smoking (past)	1.30 (1.01-1.69)	0.04546
	Smoking (current)	1.37 (1.03-1.83)	0.03265

CVD –cardiovascular disease; DP – dietary pattern; OR (95% CI) – odds ratio (95% confidence interval); IFG – impaired fasting glucose; L, Q, C - the coefficients of linear, quadratic and cubic relationships, respectively; Energy intake_kod – categorical variable by median value

Table S12. OR calculated using averaged models for visceral obesity prevalence in relation to dietary patterns adjusted for other predictors

Model	Variables in model	OR (95% CI)	p
Visceral obesity prevalence vs Healthy Dietary Pattern	(Intercept)		0.00000
	Age	1.03 (1.02-1.05)	0.00005
	BMI	2.12 (1.97-2.28)	0.00000
	Healthy DP (L)	0.68 (0.49-0.94)	0.02100
	Healthy DP (C)	1.11 (0.83-1.48)	0.48976
	Healthy DP (Q)	0.83 (0.62-1.10)	0.19463
	Energy intake	1.00 (1.00-1.00)	0.42801
	Fiber	1.00 (0.99-1.02)	0.53434
	Gender (Male)	0.24 (0.17-0.34)	0.00000
	Place of residence (urban)	0.32 (0.23-0.45)	0.00000
	Saturated fatty acids	1.01 (0.96-1.05)	0.79784
	Smoking (past)	1.10 (0.78-1.54)	0.58726
	Smoking (current)	1.43 (0.98-2.08)	0.06657
Visceral obesity prevalence vs Unhealthy Dietary Pattern	(Intercept)		0.00000
	Age	1.03 (1.02-1.05)	0.00003
	BMI	2.12 (1.97-2.28)	0.00000
	Unhealthy DP (L)	1.44 (0.97-2.12)	0.06949
	Unhealthy DP (C)	1.08 (0.82-1.44)	0.57688
	Unhealthy DP (Q)	1.02 (0.76-1.37)	0.88244
	Energy intake	1.00 (1.00-1.00)	0.17693
	Fiber	1.00 (0.98-1.01)	0.70521
	Gender (Male)	0.26 (0.19-0.37)	0.00000
	Place of residence (urban)	0.32 (0.23-0.45)	0.00000
	Saturated fatty acids	1.00 (0.96-1.04)	0.98469
	Smoking (past)	1.12 (0.80-1.57)	0.52002
	Smoking (current)	1.45 (0.99-2.11)	0.05665
Visceral obesity prevalence vs Traditional Dietary Pattern	(Intercept)		0.00000
	Age	1.03 (1.02-1.05)	0.00007
	BMI	2.11 (1.96-2.27)	0.00000
	Traditional DP (L)	0.90 (0.66-1.23)	0.52298
	Traditional DP (C)	1.04 (0.78-1.40)	0.77353
	Traditional DP (Q)	1.07 (0.80-1.43)	0.63778
	Energy intake	1.00 (1.00-1.00)	0.96667
	Fiber	1.00 (0.98-1.01)	0.59990
	Gender (Male)	0.28 (0.20-0.38)	0.00000
	Place of residence (urban)	0.29 (0.21-0.40)	0.00000
	Saturated fatty acids	1.01 (0.97-1.05)	0.68189
	Smoking (past)	1.11 (0.79-1.55)	0.56101
	Smoking (current)	1.45 (1.00-2.12)	0.05177

CVD –cardiovascular disease; DP – dietary pattern; OR (95% CI) – odds ratio (95% confidence interval); BMI – body mass index; L, Q, C - the coefficients of linear, quadratic and cubic relationships, respectively

Table S13. OR calculated using averaged models for overweight and obesity prevalence in relation to dietary patterns adjusted for other predictors

Model	Variables in model	OR (95% CI)	p
Overweight + obesity prevalence vs Healthy Dietary Pattern	(Intercept)		0.0650
	Age_kod	2.31 (1.88-2.84)	0.0000
	Healthy DP (L)	1.06 (0.83-1.36)	0.6361
	Healthy DP (C)	0.96 (0.78-1.17)	0.6581
	Healthy DP (Q)	0.91 (0.74-1.12)	0.3766
	Energy intake	1.00 (1.00-1.00)	0.0677
	Fiber	1.01 (1.00-1.03)	0.0992
	Gender (Male)	1.94 (1.53-2.46)	0.0000
	Place of residence (urban)	0.63 (0.50-0.80)	0.0001
	Saturated fatty acids	1.01 (0.97-1.04)	0.7176
	Smoking (past)	1.58 (1.24-2.01)	0.0002
	Smoking (current)	0.89 (0.69-1.15)	0.3819
Overweight + obesity prevalence vs Unhealthy Dietary Pattern	(Intercept)		0.16776
	Age_kod	2.28 (1.85-2.80)	0.00000
	Unhealthy DP (L)	0.72 (0.56-0.93)	0.01114
	Unhealthy DP (C)	1.20 (0.98-1.46)	0.07436
	Unhealthy DP (Q)	1.26 (1.03-1.54)	0.02613
	Energy intake	1.00 (1.00-1.00)	0.74442
	Fiber	1.01 (1.00-1.02)	0.11156
	Gender (Male)	1.89 (1.51-2.36)	0.00000
	Place of residence (urban)	0.61 (0.49-0.76)	0.00001
	Saturated fatty acids	1.01 (0.98-1.04)	0.65290
	Smoking (past)	1.55 (1.22-1.98)	0.00041
	Smoking (current)	0.89 (0.69-1.14)	0.35180
Overweight + obesity prevalence vs Traditional Dietary Pattern	(Intercept)		0.002060
	Age_kod	2.32 (1.89-2.86)	0.000000
	Traditional DP (L)	1.59 (1.24-2.03)	0.000220
	Traditional DP (C)	0.88 (0.72-1.08)	0.209430
	Traditional DP (Q)	0.96 (0.78-1.18)	0.728380
	Energy intake	1.00 (1.00-1.00)	0.054550
	Fiber	1.01 (1.00-1.03)	0.093840
	Gender (Male)	1.81 (1.44-2.27)	0.000000
	Place of residence (urban)	0.68 (0.54-0.86)	0.001140
	Saturated fatty acids	1.01 (0.97-1.04)	0.691680
	Smoking (past)	1.56 (1.22-1.99)	0.000370
	Smoking (current)	0.88 (0.68-1.14)	0.345690

CVD –cardiovascular disease; DP – dietary pattern; OR (95% CI) – odds ratio (95% confidence interval); L, Q, C - the coefficients of linear, quadratic and cubic relationships, respectively; Age_kod – categorical variable by median value